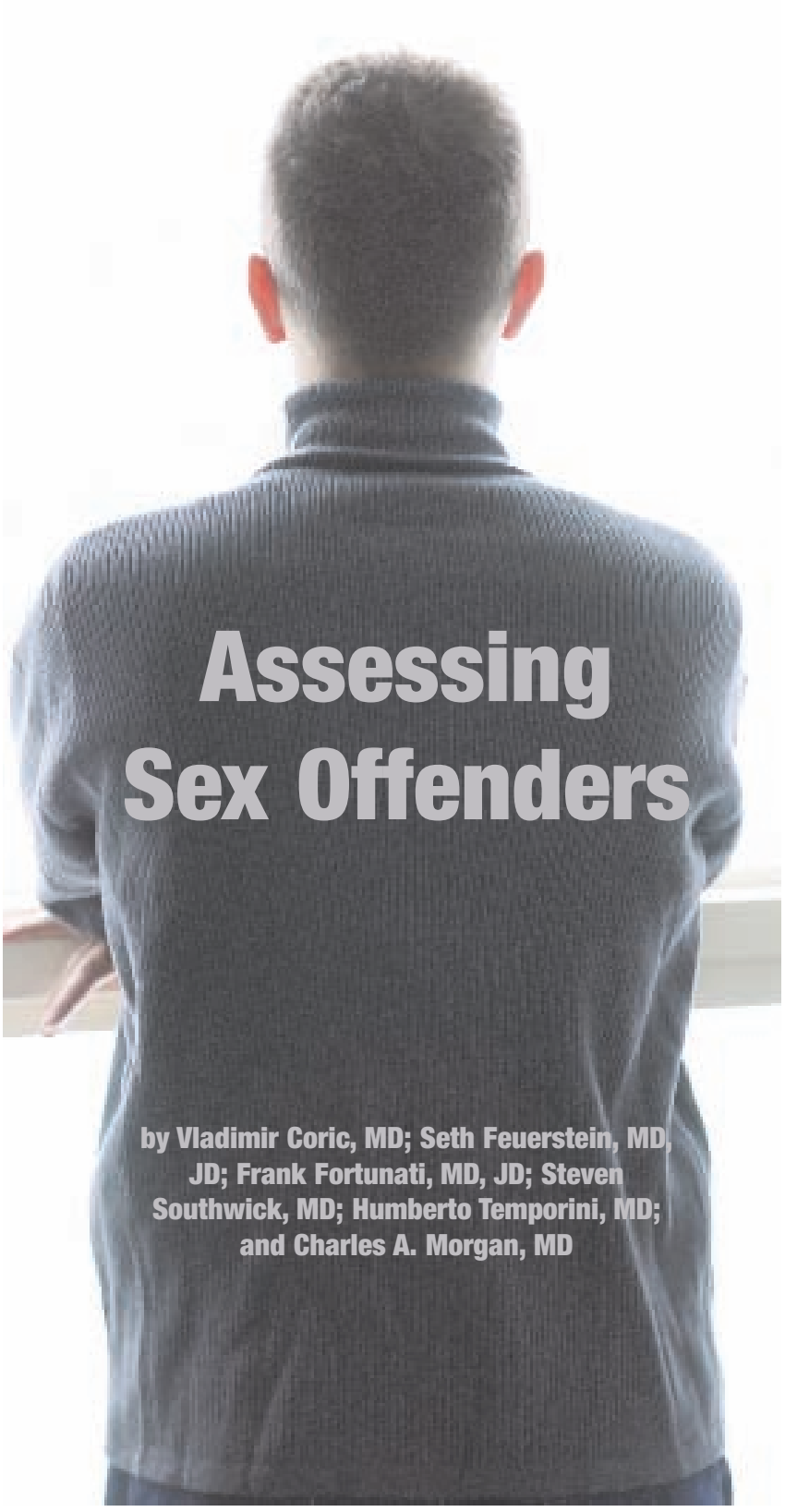

Assessing Sex Offenders

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Unfortunately, the incidence of sexual assault has increased over the past decade,[1,2] and the long-term management of sex offenders has been fervently debated in our society. In the United States, approximately 234,000 sexual offenders are under the custody of correctional agencies each day, and more than half are under conditional supervision in the community.[1] Sexual victimization is routinely prosecuted, but sex offenders have a high rate of recidivism and are up to 10 times more likely to be re-arrested for another violent sexual assault than individuals convicted of other crimes.[3] With state legislatures increasingly passing legislation to allow for the civil commitment of repeat sexual offenders to mental health facilities and the creation of sex offender registries, psychiatrists have found themselves thrust into this nexus of society and the legal system. Forensic psychiatrists are often asked to evaluate individuals accused or convicted of sexual offenses for a variety of purposes, including the assessment of dangerousness, risk for recidivism, involuntary commitment, inclusion in a state's sex offender registry, competency, and criminal responsibility.

Like most other forensic evaluations, the assessment of sexual offenders involves performing a comprehensive psychiatric evaluation, reviewing available police reports and criminal history, and contacting available collateral sources of information to verify information provided by the defendant. In addition, the accurate assessment of individuals involved in sexual crimes requires a detailed sexual

history and careful evaluation for deviant sexual arousal patterns. Sexual assessment questionnaires are often used as a guide to aid in the clinical assessment of sexual history and behavioral patterns. Common sexual assessment scales include the Derogatis Sexual Functioning Inventory and the Multiphasic Sex Inventory. Areas of deviant sexual interests endorsed on such questionnaires can then be routinely examined during subsequent clinical evaluations.

In addition to obtaining an individual's subjective self-report of sexual arousal patterns, it is important to incorporate objective measures of an individual's sexual preferences. Manipulation of true arousal patterns compromises the evaluation of sexual offenders and results in inaccurate risk assessment decisions. Given the obvious motivation to hide true arousal patterns when a defendant commits a sexual offense, psychiatrists are increasingly turning toward objective measures of sexual arousal in the attempt to improve the accuracy of sexual arousal assessment. The remainder of this article will familiarize the reader with readily available psychophysiological techniques used in the assessment of sex offenders. Physiologic assessment techniques commonly used to evaluate sexual arousal include penile plethysmography, visual reaction time, and polygraphy.

PENILE PLETHYSMOGRAPHY

Currently, the only "objective" means of assessing pedophilic sexual interest is by directly measuring penile erections in response to visual, auditory, or emotional cues. Penile plethysmography, a technique developed over 40 years ago, is used to measure changes in penile arousal in response to such stimulation. The two types of penile plethysmography widely used today measure changes in either penile volume or circumference.

Volume plethysmography measures the displacement of air in a cylinder enclosing the penis—typically, a glass or rigid cylinder is placed over the penis with an inflatable cuff that encloses the base of the penis. When the penis becomes erect and engorged with blood, air is displaced within the cylinder. The resultant increase in the intra-cylinder pressure is then used to calculate an indirect measure of penile volume.[4,5] Alternatively, circumferential plethysmography directly measures changes in penile diameter in response to sexual stimuli and has been demonstrated as an effective method of measuring sexual arousal.[6,7] A mercury strain gauge is placed around the base of the penis and is connected to an instrument that monitors small alterations in voltage through the strain gauge. Before applying the strain gauge to a subject, the device is calibrated to correlate changes in voltage with known diameter settings. As a subject is exposed to sexual stimuli, alterations in voltage through the strain gauge are monitored and converted to penile diameter size based upon on the pre-calibrated settings. Both volume and circumferential plethysmography should be administered in a controlled environment that minimizes exposure to external stimuli that might interfere with test results (a dark, sound attenuated booth is ideal).

Studies suggest that volume plethysmography is more sensitive than circumferential plethysmography in measuring small changes in penile erections.[8–10] However, volume plethysmography is a more technically cumbersome procedure and may be associated with movement artifacts as well as inaccurate measurements due to inadequate cuff seal around the base of the penis. A study by Kuban, et al., in 1999 suggested that volume plethysmography and circumferential plethysmography highly correlated with each other when subjects reached 10 percent of full erection or a 2.5mm increase in penile circumference. Circumferential plethysmography is more commonly used due to its ease of application, lower potential of technical error in applying the device, and equal accuracy of detecting penile erections. However, volume plethysmography may be the test of choice when detecting small changes in penile arousal is necessary (i.e., when using stimuli that may elicit less than a 10-percent erection).

Penile plethysmography test results are often used to characterize patterns of deviant sexual arousal, develop treatment plans, and monitor the effectiveness of treatment.[11] However, the use of penile plethysmography has been criticized for its lack of standardized testing and scoring techniques as well as its vulnerability to purposeful alterations of test results.[12] Faking test measures by suppressing penile arousal or initiating erections to normal sexual stimuli

can be problematic. Manipulation of true arousal patterns compromises the evaluation of sexual offenders and may result in inaccurate risk assessment decisions. Additionally, there are ethical concerns associated with the intrusiveness of using plethysmography in adolescents and having subjects view pornographic stimuli (especially of children). Despite its limitations, penile plethysmography is generally considered the most accurate measure of sexual arousal.

VISUAL REACTION TIME

Visual reaction time, or the amount of viewing time spent looking at a particular image, has been hypothesized as being a nonintrusive method of measuring sexual interest.[13–16] Based upon the notion that visual reaction time is an indicator of sustained sexual interest, Dr. Gene Abel and associates developed a commercially available product, the Abel Assessment for Sexual Interest. The Abel Assessment for Sexual Interest consists of both subjective and objective components designed to measure sexual interest by age and gender. The first portion of the Abel Assessment consists of a questionnaire that gathers information regarding the client's sexual preferences and behaviors, legal history, and self-reported ability to control their sexual behaviors. The questionnaire also contains items that are analyzed to assess whether the client is feigning test results, has cognitive distortions about having sex with children, or fits a statistical profile of individuals (known offenders) who have sexually abused children. The objective measure of the Abel Assessment is performed during the second part of the test. Visual reaction time is measured beyond the client's awareness while viewing 160 slides (in 22 categories) depicting clothed children, teens, and adults. During this portion of the test, the client is also asked to rate his or her degree of sexual arousal to the visual stimuli. Data obtained from the testing is sent to Abel Screening, Inc. for processing and analysis; a detailed report of the client's response patterns is then provided to the testing site.

Many sites are increasingly utilizing the Abel Assessment due to its ease of administration and noninvasive method of measuring sexual interest. However, the reliability, validity, and statistical analysis of the data supporting the Abel Assessment have been debated in the literature.[17–19] Additionally, the admissibility of the Abel Assessment in the courts remains unclear. Care should be taken not to make improper clinical extrapolations regarding risk assessments, predictions of recidivism, or proving/disproving sexual abuse allegations based solely upon the results of the Abel Assessment. When used as part of a comprehensive psychiatric evaluation, the Abel Assessment may be a useful tool in assessing sexual interest and obtaining a thorough sexual behavior history.

POLYGRAPH ASSESSMENTS

Individuals accused and convicted of sexual offenses have little incentive to provide truthful information regarding their offenses or compliance with mandated treatment programs. The polygraph has increasingly been utilized to verify information

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provided by sex offenders regarding the details of the alleged offense, conduct, and past sexual history. Additionally, the polygraph is used to monitor the veracity of reports of a convicted offender's compliance with treatment plans or terms of probation. Studies have demonstrated that polygraph testing can be an effective means of obtaining a comprehensive sexual offense history and increasing the number of disclosures made by offenders.[20,21] Polygraph results are highly dependent on the examiner's expertise, and results are generally not admissible in court. Like other psychophysiological measures, polygraph testing is criticized for its lack of standardization and generalizability of research findings.

In summary, psychophysiological testing can play a useful, but limited, role in the assessment of sex offenders. Physiologic test results should only be used in conjunction with a thorough psychiatric evaluation, comprehensive sexual history, and clinical expertise. Additionally, great care should be taken not to over-generalize test results. One thing worth mentioning is that the use of psychophysiological tests to accurately predict recidivism for any given individual has not been demonstrated in controlled studies. Additionally, test results should not be used in determining the truth of allegations.

FUTURE DIRECTIONS

Because effective control and treatment of deviant sexual behaviors depends on identification and understanding of the underlying dysfunction, assessment techniques that provide insight into the etiology of a behavior are critical to reducing sexual predator crimes. Additional research is needed to further investigate the interactions between the biological and psychosocial factors associated with deviant sexual behavior. Advances in both psychiatry and neuroimaging techniques allow for the exact imaging of neuroanatomical correlates of sexual arousal and represent ongoing areas of future research. More accurate and reliable assessment techniques will ultimately improve treatment outcomes and decrease the rate of sexual victimization.

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